

Remarks

The present amendment has been made after a careful review of the present application, the references of record, and the Office Action dated March 9, 2004. In the Office Action, the examiner objected to Figures 1 through 5 of the drawings as not bearing the legend "prior art" and objected to certain dependent claims as referring to "an insert" rather than "a tool." The examiner further rejected claims 1 and 3 under 35 USC 102(b) as being anticipated by Russian reference SU899916 and rejected claims 1, 3 – 5, 8, 10, 12 – 16, 18, 21, 22, 30, and 31 under 35 USC 102(b) as anticipated by Massa. Claims 2, 11, and 25 – 28 were rejected under 35 USC 103(a) as being unpatentable over Massa and various other claims were rejected under judicially created doctrine of non-obviousness type double patenting.

In the forgoing amendment, the applicant has submitted markup sheets showing amendments to Figures 1 through 5 and corrected drawings for Figures 1 through 5. Additionally, the applicant has amended the dependent claims that bore an incorrect reference to a "insert" as the examiner requested. Claim 1 has been amended to include the elements of claim 7, including the intervening claim 4 on which claim 7 is dependent and deleting the provision that the base engages ridges between grooves such that amended claim 1 is claim 7 written in independent form with the omission of the references to the base engaging ridges. Since the examiner has asserted in the Office Action that no weight is to be given to the base-engaging ridges, it is submitted that the deletion of this

reference does not significantly broaden the claim. Claim 1, as amended, clearly defines over Massa, and since the examiner has acknowledged that claim 7 would be allowable if placed in independent form, the applicant believes that amended claim 1 is now allowable.

The applicant has amended claim 10 to recite that an insert of the cutting tool has a forward surface that slopes gradually rearwardly at an angle of about eight degrees from a horizontal. The feature of a base having a nearly planar upper surface sloping rearwardly at a small angle is not disclosed in Massa. This element was recited in claim 19, which ultimately was dependent upon claim 10 and cited by the examiner as an allowable claim if claim 19 were put in independent form and incorporated the elements of all intervening claims. Since amended claim 10 clearly defines over Massa, the applicant believes that amended 10 is allowable.

The applicant also traverses the rejection of claim 21, which has been amended to further recite that the insert in the cutting tool has a forward surface extending radially outward of a fillet to an outer diameter of a base, with the outer diameter of the base broken by a plurality of indentations forming radial flanges, and where the indentations have a minimum diameter greater than the maximum diameter of the fillet such that the fillet does not extend into the radial flanges. Massa, on the other hand, discloses an insert having a base with a plurality of indentations, however, the indentations 98 of Massa clearly extend into the diameter of a circle defined by the outer diameter of the fillets 84 as best seen in

both Fig. 3 and Fig. 8 of Massa. Accordingly, claim 21, as amended, clearly defines over Massa and the rejection on the basis of Massa must be withdrawn.

One reference of interest is the applicant's previously issued U.S. Patent No. 6,554,369. The applicant points out, however, that a salient feature of the cutting tip disclosed in Sollami patent no. 6,554,369 is that the mid-section slopes to a cylindrical base having a diameter equal to the maximum diameter of the mid-section such that a fillet does not exist between the mid-section and the base. The insert further has a plurality of radial flanges that extend outward of the base portion only, and not from the mid-section such that no definable fillet exists between the mid-section and the base. This structure is depicted in all the figures of Sollami patent no. 6,554,369. In view of the forgoing, the applicant submits that amended claim 21 clearly defines over all the art of record.

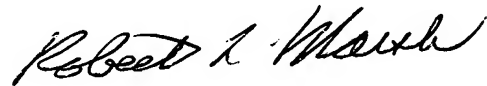
Independent claim 31 has been canceled and new claim 32 has been added. New claim 32 recites a rotary cutting tool having an insert with a forward surface extending radially outward of a fillet to an outer diameter of the base with the forward surface sloping rearwardly at an angle of about eight degrees from a horizontal. New claim 32 incorporates the inventive elements of claims 9 and 19, namely that the forward surface slopes at an angle of approximately eight degrees from a horizontal. The applicant asserts that none of the references appreciate the desirability of a forward surface with a gradual rearward slope as set forth in the specification of the present application and as recited in new claim 32. Accordingly, the applicant believes that new claim 32 is allowable.

The applicant asserts that claims 2 – 6, and 8, which are dependent upon claim 1 are allowable for the same reasons set forth with respect to claim 1. In similar fashion, claims 11 through 17 and 20, which are dependent upon claim 10, are allowable for the same reasons asserted with respect to claim 10. Claims 23 – 25 and 27 – 29 are all dependent upon claim 21 and are allowable for the reasons set forth with respect to claim 21 and those claims dependent upon new claim 32 are likewise believed to be allowable.

The applicant also submits herewith a terminal disclaimer with respect to Sollami US Patent no. 6,554,369 to thereby overcome the judicially created double patenting objection.

In view of the forgoing, the applicant submits that the present application is now in condition for allowance and favorable reconsideration and allowance is requested.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Robert L. Marsh". The signature is fluid and cursive, with the first name "Robert" and last name "Marsh" clearly distinguishable.

Robert L. Marsh
Reg. No. 25894
Attorney for the Applicant
630-681-7500
Fax: 630-681-3464

In the drawings:

Please amend the drawings as shown on the attached pages.